

## Claims

- [c1] 1.A method of raising the blood sugar level in a mammal having hypoglycaemia by reducing degradation of glucagon, said method comprising administering to said mammal a therapeutically effective amount of an effector for reducing enzymatic activity of dipeptidyl peptidase (DP IV) and DP IV-analogous enzymes.
- [c2] 2. The method of claim 1, wherein the blood sugar level in the serum of mammalian organisms is raised above the glucose concentration characteristic of hypoglycemia.
- [c3] 3.The method of claim 1, wherein the effector is selected from the group consisting of DP IV enzyme inhibitors, substrates of DP IV, pseudo-substrates of DP IV, inhibitors of DP IV expression, proteins that bind DP IV or antibodies to DP IV and combinations thereof.
- [c4] 4.The method of claim 1, wherein the effector for reducing enzymatic activity is employed together with glucagon or analogues thereof.
- [c5] 5.The method of claim 1, wherein the effector for reducing enzymatic activity is employed in combination with physiologically acceptable adjuvants and/or excipients.
- [c6] 6. A method for stimulating endogenous glucose production via glucagon stabilization in a mammal comprising the step of administering to said mammal a therapeutically effective amount of a Dipeptidyl peptidase IV inhibitor in a pharmaceutically acceptable preparation for reducing in said mammal the enzymatic activity of endogenous DP IV and thereby reducing degradation of glucagon.